

REMARKS

This is in response to the Office Action mailed March 24, 2004 and the Advisory Action mailed June 16, 2004, in which the Examiner rejected claims 1-19. Reconsideration of the application as amended is respectfully requested.

Amendments

In addition to several claim amendments, this Amendment includes corrections of minor errors in the specification. Additionally, Applicant has rephrased the description of the relative motion between the magnetic medium (disc) and the head of the prior art (FIG. 2) and the heads of the present invention (FIGS. 5 and 7). Rather than describing the motion of the head relative to the magnetic medium, as originally provided, the specification has been amended to describe the motion of the magnetic medium relative to the head. Accordingly, this change required amendments to FIGS. 2, 5 and 7 to modify the arrows 172 and 201 such that they point in the opposite direction than as originally filed. Accordingly, the amended paragraphs provide merely a rephrasing of the original description without any substantive change thereto. Applicant believes that the new description is more appropriate since the magnetic medium is the primary moving component.

Objection to the Title

In Section 1 of the Office Action, the Examiner objected to the title of the invention as being insufficiently descriptive. Applicant has amended the title to more particularly describe the invention. Accordingly, Applicant requests that the objection be withdrawn.

Claim Rejections - 35 U.S.C. §103(a)

In Section 3 of the Office Action, the Examiner rejected claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) as shown in FIG. 2 and described on pages 5-10 in view of Lairson et al. (U.S. Patent No. 5,822,153).

Applicant respectfully disagrees with the Examiner's assessment of the cited references and believes that the rejections can be withdrawn. In the Office Action, the Examiner found FIG. 2 of the cited AAPA to show a perpendicular writing element 134 "having a return pole tip, located downstream of pole 144 [main pole] relative to the rotating disc 102." However, as explained in Applicant's Response to the Office Action mailed June 19, 2003, the cited AAPA shows a return pole tip that is located upstream of the main pole. As presently stated in the specification, arrow 172 represents the direction of movement of the magnetic medium (disc 102) relative to head 130. Therefore, the downstream direction relative to the disc 102 is the same direction as that indicated by arrow 172. Accordingly, return pole 140 is located upstream of main pole 144 relative to the magnetic medium. Furthermore, read element 138 of FIG. 2 is located upstream of the writing element 134 of head 130.

Applicant also disagrees with the Examiner's assessment of Lairson et al. including the finding that "Lairson et al shows in figure 3 head 69 including perpendicular writing element 75 including a main pole 84 having a main pole tip and a return pole 88 having a return pole tip located downstream of pole 84 relative to rotating disc 41." In particular, Lairson et al. only describe the head 69 depicted in FIG. 3 as being "formed of a pair of pole tips 82 and 84 which are separated by an [sic.] a magnetic gap 86, the pole tips acting as terminals of magnetically permeable yoke layers 88 and 90 which form a write circuit which is activated by an electrical current and coil layer 93." See Col. 5, lines 40-44

of Lairson et al. Accordingly, Lairson et al. provide no basis for the Examiner's finding that the cited pole tip 84 operates as a main pole, which is located upstream of the cited return pole 88 relative to the rotating disc.

Therefore, the cited references do not disclose the head of independent claim 1, since neither the cited AAPA nor Lairson et al. disclose or suggest a perpendicular writing element including "a main pole . . . [and] a return pole . . . located downstream of the main pole relative to the moving magnetic medium", as described therein. Therefore, Applicant submits that claim 1 is allowable in view of the cited art, and requests that the rejection be withdrawn. Additionally, Applicant submits that claims 2-9 are allowable as being dependent from allowable base claim 1, and requests that the rejections be withdrawn.

Likewise, Applicant submits that the cited AAPA and Lairson et al. fail to disclose the head of independent claim 10. In particular, the cited art fails to disclose or suggest "a perpendicular writing element including a main pole . . . [and] a return pole . . . located downstream of the main pole relative to the moving magnetic medium", as described in claim 10. Accordingly, Applicant submits that claim 10 is allowable in view of the cited art, and requests that the rejection be withdrawn. Additionally, Applicant submits that claims 11-13 are allowable as being dependent from allowable base claim 10, and requests that the rejections be withdrawn.

Applicant further submits that neither the cited AAPA nor Lairson et al. disclose or suggest the head of independent claim 14. In particular, the cited prior art fails to disclose a head that includes "main and return poles separated by a write gap, the main pole positioned upstream of the return pole relative to the moving magnetic medium", as described in claim 14. Accordingly, Applicant submits that claim 14 is allowable in view of the cited references since they fail to teach or suggest all of

the claimed features, and requests that the rejection be withdrawn. Additionally, Applicant believes that claims 15-19 are allowable as being dependent from allowable base claim 14, and requests that the rejections be withdrawn.

New Claims

With this Amendment, Applicant has added new claims 20-24. Independent claim 20 is directed to a head that includes a writing element having "a main pole; and a return pole located downstream of the main pole relative to the moving magnetic medium." Applicant submits that independent claim 20 is presently in condition for allowance for the reasons set forth above with regard to independent claims 1, 10 and 14. Additionally, Applicant submits that claims 21-24 are allowable as being dependent from allowable base claim 20.

Conclusion

In view of the above comments and remarks, Applicant believes that the present application is in condition for allowance. Reconsideration and favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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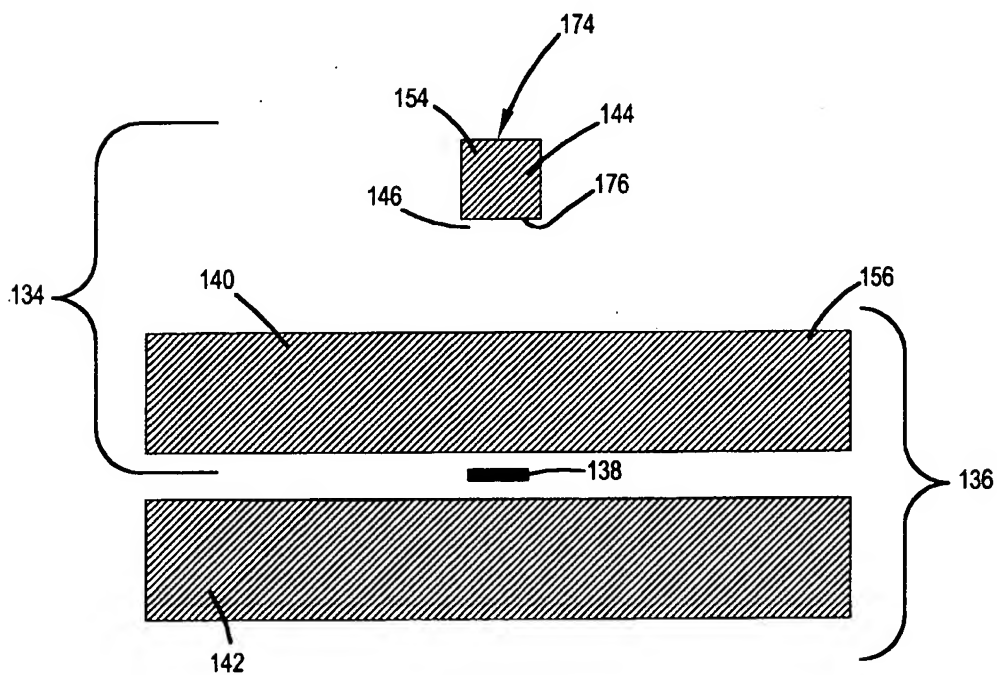
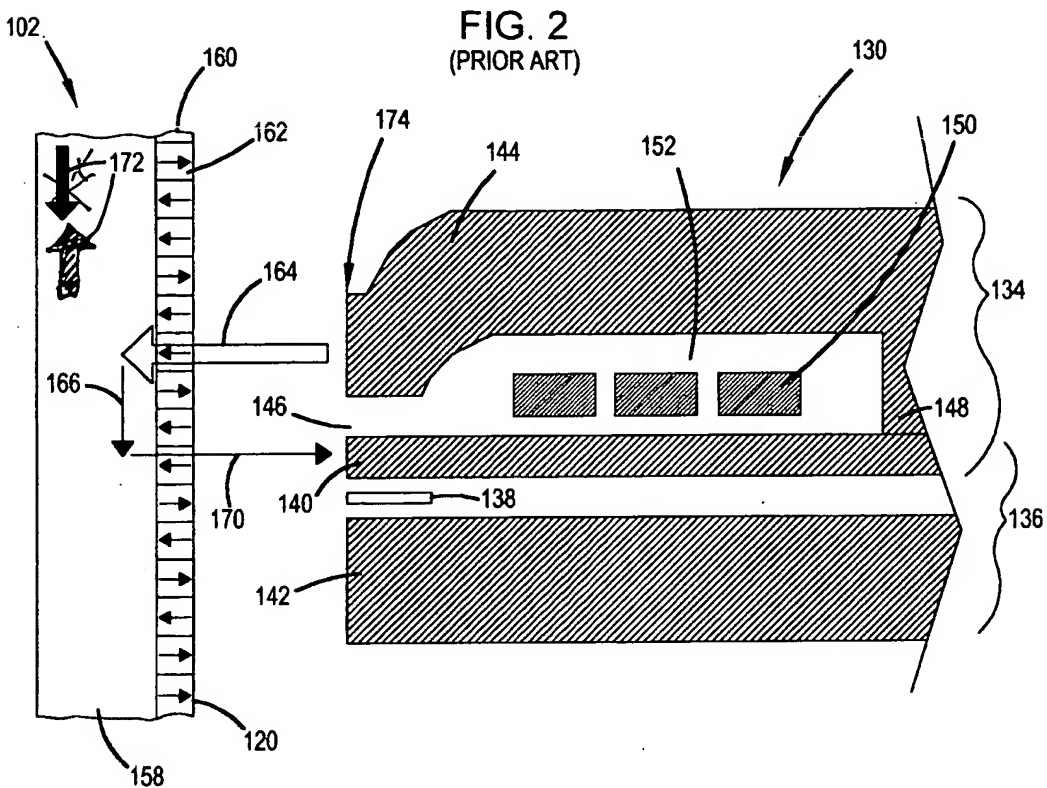


FIG. 3
(PRIOR ART)

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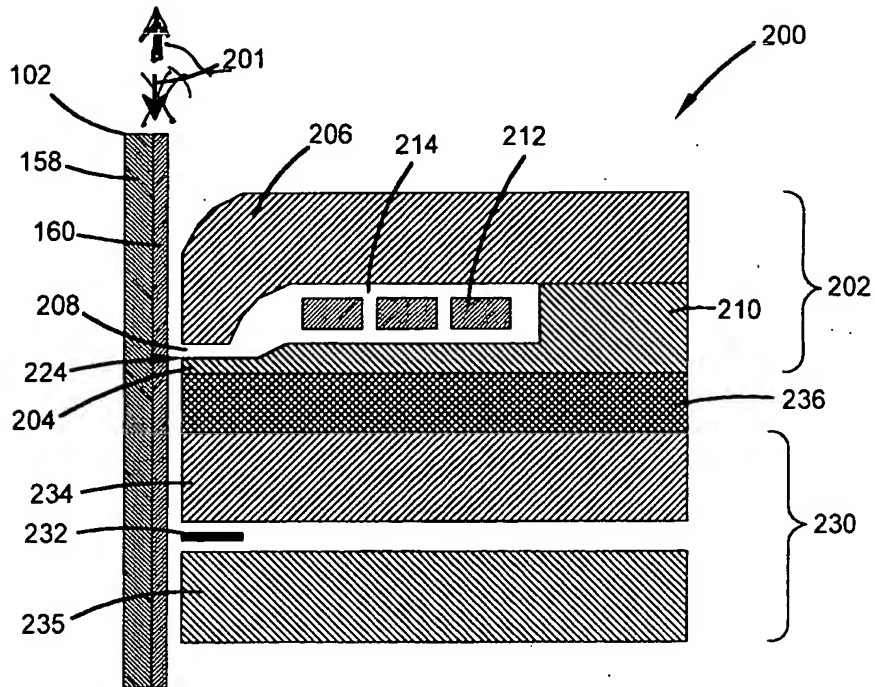


FIG. 5

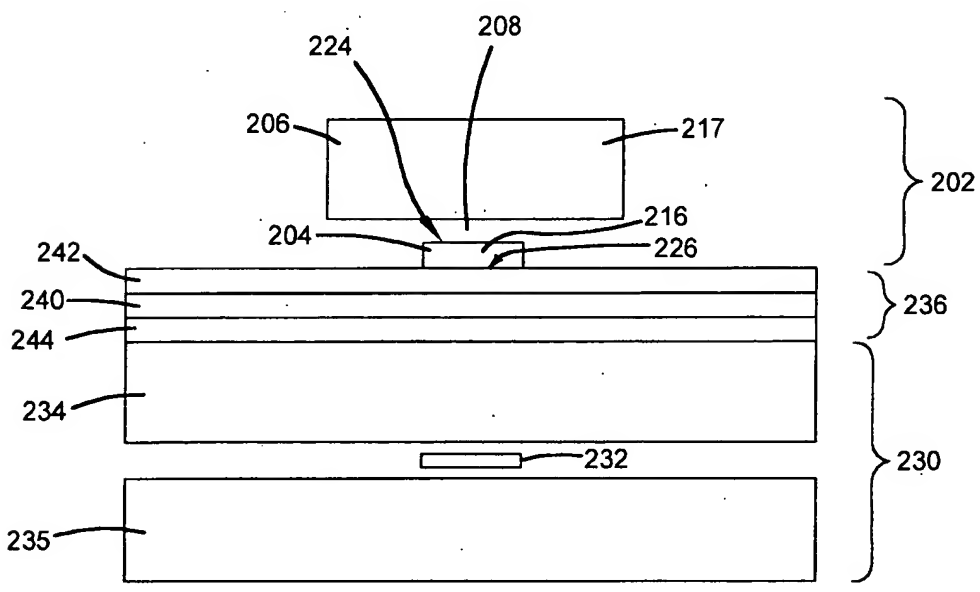


FIG. 6

